AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1-37. (canceled)

38. (new) A method for operating an image system of an imaging medical examination device, the image system having a reception unit for receiving a plurality of signals arising at different locations and a display unit for an image of pixels, the pixels each being assigned at least one signal, the method comprising the steps of:

automatically triggering, with a triggering event generated at a defined point in time after an image acquisition procedure, a defect determination for determining a defective pixel in the image and, after the defect determination, automatically triggering a correction process if a defective pixel was detected,

wherein the defect determination and the correction process comprise the steps of carrying out a first correction in which already known defects are corrected using an old defect map, analyzing the results of the first correction process to create a new defect map that describes new defects not found in

the old defect map, and carrying out a second correction in which the new defects are corrected using the new defect map.

39. (new) The method as claimed in claim 38, wherein the triggering event is derived from an operating process which does not serve for the defect determination .

40. (new) The method as claimed in claim 38, wherein the triggering event is generated at a defined point in time after a patient examination or a scan.

41. (new) The method as claimed in claim 38, wherein the triggering event is generated by a counting process.

42. (new) The method as claimed in claim 41, wherein the counting process counts a process which is repeated during operation of the medical examination device, the process being one of a switch-on process, a calibration process and an examination process.

43. (new) The method as claimed in claim 38, wherein the triggering event is generated by a time measuring process.

44. (new) The method as claimed in claim 38, wherein during the correction process, an assignment of a defective pixel to its signal is canceled and, instead of this, the defective pixel is assigned one or more signals of one or more other pixels.

45. (new) The method as claimed in claim 38, further comprising the steps of filtering the image after the first correction and analyzing the filtered image.

46. (new) The method as claimed in claim 45, wherein the filtering step includes filtering with one of a median and a high-pass filter.

47. (new) The method as claimed in claim 45, wherein during the analysis, the pixel-related signals are compared with one or more threshold values.

48. (new) The method as claimed in claim 38, wherein the old defect map is updated using the new defect map.

49. (new) The method as claimed in claim 48, wherein the updating takes place only when one or more defects that are new or still present are detected.

50. (new) The method as claimed in claim 38, wherein the first correction includes a flat-fielding correction of the image.

51. (new) The method as claimed in claim 38, further comprising the step of automatically sending a message sent via a data link to a service device if a defective pixel was detected after the defect determination.

52. (new) The method as claimed in claim 38, wherein a pixel is defective if its associated signal falls below a minimum value.

53. (new) The method as claimed in claim 38, wherein a pixel is defective if noise in its associated signal exceeds a maximum value.

54. (new) The method as claimed in claim 38, wherein the defect determination is carried out on a stored image.

55. (new) An imaging medical examination device having an image system, the image system having a reception unit for receiving a plurality of signals arising at different locations

and a display unit for an image of pixels, the pixels each being assigned at least one signal, the device comprising:

a detection device for automatically determining a defective pixel in the image, said detection device being activated by an event of an undisturbed operation of the medical examination device; and

a correction device for automatically eliminating a defective pixel that has been detected, said correction device being connected said detection device and is activated thereby if a defective pixel is detected,

said detection device analyzing an image that has been corrected in said correction device in a first correction with regard to already known defects for the purpose of determining a defect that is new or still present,

said correction device carrying a second correction of the corrected image with regard to a defect that is new or still present;

said detection device generating a new defect map that describes the detected defect that is new or still present, and said correction device corrects the image in the second correction using the new defect map, and

said correction device correcting the image using an old defect map that describes already known defects in the first correction.

56. (new) The examination device as claimed in claim 55, wherein said detection device detects a defective pixel when an associated signal falls below a minimum value.

57. (new) The examination device as claimed in claim 55, wherein said detection device detects a defective pixel when noise in an associated signal exceeds a maximum value.

58. (new) The examination device as claimed in claim 55, wherein said detection device comprises a filter for filtering the image after the first correction and an analysis means for determining a defect that is new or still present.

59. (new) The examination device as claimed in claim 58, wherein said filter is one of a median filter and a high-pass filter.

60. (new) The examination device as claimed in claim 59, wherein said analysis means compares a signal associated with a pixel with one or more threshold values to determine a defect.

61. (new) The examination device as claimed in claim 55, wherein said detection device updates the old defect map using the new defect map.

62. (new) The examination device as claimed in claim 55, wherein said correction device carries out a flat-fielding correction of the image in the first correction.

63. (new) The examination device as claimed in claim 55, wherein said detection device comprises a data interface for sending a message to a service device, and wherein the message is sent automatically by said detection device if a defective pixel is detected.

64. (new) The examination device as claimed in claim 55, wherein said detection device is connected to an image memory from which an image generated by the image system at an earlier time is retrievable.

65. (new) A method for operating an image system of an imaging examination device, the method comprising the steps of:

providing an old defect map showing existing defective pixels;

generating an image;

first correcting the image by correcting the existing defective pixels with reference to the old defect map;

analyzing the first corrected image to find new defective pixels;

generating a new defect map showing the new defective pixels; and

second correcting the analyzed image by correcting the new defective pixels with reference to the new defect map.

66. (new) The method of claim 65, further comprising the steps of adding the new defective pixels to the old defect map to generate an updated defect map and replacing the old defect map with the updated defect map.